REMARKS

Claims 1, 3, 5, 6, 8-10, 12, 13, 15, 17-19, 21 and 24-27 are pending in this application. By this Amendment, claims 4, 7, 11, 20 and 23 are canceled without prejudice or disclaimer of the subject matter therein and claims 1, 3, 5, 8-10, 12, 15, 19 and 20 are amended. Reconsideration in view of the above amendments and following Remarks is respectfully requested.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the Amendments: 1) place the application in condition for allowance (for the reasons discussed herein); 2) do not raise any issues requiring further search and/or consideration (the amendments amplify issues previously discussed throughout prosecution and incorporate dependent claims without incorporating additional subject matter or raising new issues); and 3) place the application in better form for appeal (if necessary).

Applicant notes that the amendment to claim 1 merely incorporates features from dependent claims 4, 7 and 11 and amends the language to more clearly emphasize features claimed in previously filed claim 1 along with claims 4, 7 and 11. Further, the amendment to claim 15 merely incorporates features from dependent claims 20 and 23 and amends the language to more clearly emphasize features claimed in previously filed claims 15, 20 and 23. Entry of the Amendment is thus requested.

I. 35 U.S.C. § 103(A)

The Office Action rejects claims 1, 3-13, 15, 17-21 and 23-27 under 35 U.S.C. § 103(a) over various combinations of Butterworth et al. (U.S. Patent No. 6,005,722 – hereinafter Butterworth), Sawai et al. (U.S. Patent No. 6,343,862 – hereinafter Sawai), Levis et al. (U.S. Patent No. 5,884,991 – hereinafter Levis), Gleckman (U.S. Patent No. 6,266,105 – hereinafter Gleckman), Dove et al. (U.S. Patent No. 6,082,861 – hereinafter Dove), and Doany (U.S. Patent No. 5,863,125 – hereinafter Doany). Claims 4, 7, 11, 20 and 23 have been canceled without prejudice or disclaimer of the subject matter therein, therefore the rejection of these claims is moot. Since all six references, alone or in combination, fail to disclose or suggest all of the features of the remaining claims, the rejection is respectfully traversed.

Applicant respectfully submits that one of ordinary skill in the art would not have combined these six references to form the system of the claimed invention. While the Butterworth system includes many similar elements used in the claimed invention, a system including each component of the claimed invention is not disclosed. Applicant submits that the complete assembly including the lamp, the color wheel, the rod lens, the polarized beam converter, the optical system, the reflection type or transmissive type display, the polarization beam sprite prism, and the projection lens, each of which work in conjunction with each other and is not disclosed or suggested by any one or any combination of the six references.

Applicant further submits that while each of the six references may disclose certain parts of the claimed invention, the combination thereof to form the claimed invention of parts from

each of the references could only be made through impermissible hindsight. Applicant submits that the Office Action analyzes the invention in parts and uses the present invention as a template to pick and choose the elements recited.

Applicant notes that it is impermissible hindsight to engage in reconstruction of the claimed invention using Applicant's structure as a template and selecting elements from the references to fill in the gaps. See In re Gorman, 18 USPQ2d 1885 (Fed. Cir. 1991), citing, Interconnect Planning Corp. v. Feil, 227 USPQ 543 (Fed. Cir. 1985). For example, a polarization film is picked from Sawai without any other features, a cylindrical filter is picked from Gleckman, a light pipe is picked from Levis, etc. Each part from each of the references is specifically used in their own specific systems for a particular purpose. Each element is not used alone, or as a mere improvement, but as an entire system. Picking and choosing from single elements of entire systems requires impermissible hindsight.

Furthermore, the Office Action also improperly reduces the invention to the "idea" of providing an image projector with various components, and then determines patentability of that "idea" in error. Applicant submits that in the claimed invention, the lamp works in combination with the elliptical reflector, which in turn works in combination with the color wheel, which in turn works in conjunction with the rod lens, which also works in conjunction with the polarized beam converter, the optical system, the display, the polarization beam sprite prism, and the

projection lens to form a complete image projector system that can be made thinner than the related art by using the elliptical reflector in combination with various other components including a polarization beam sprite array and a polarization prism.

The Office Action states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Butterworth by the substitution of a polarization conversion system as taught by Sawai, for a polarization film in order to make use for the entire illumination beam and avoid light losses. However, Butterworth do not seem to have any illumination beam or light loss issues as the Butterworth system is complete in and of itself and appears to use the compound parabolic concentrator, integrator, etc., to make use of the entire illumination beam and avoid light losses. Furthermore, Sawai requires the use of polarization conversation as the system of Sawai is arranged in a completely different configuration from Butterworth. For example, see Fig. 1 of Butterworth and Fig. 5 of Sawai.

The Office Action further states that it further would have been obvious to modify the combination by the substitution of a tapered light pipe with an output section of lesser area than an input area, or other different sized inputs or outputs, in order to match the output size to the elements to be eliminated. However, no such reference has been provided showing any tapered light pipe let alone a teaching where a tapered light pipe would be advantageous in Butterworth. Applicant requests production of a reference to a tapered light pipe, as this element is clearly recited in the claims. In Fig. 6 of Butterworth, the light pipe 136 of the optical train 116 has an input face 138 to diffuse and randomize the incoming light, however, as illustrated in Fig. 2, a

compound parabolic concentrator (CPC) can also be used, but no such tapering of an output section to have a lesser area than an input section is disclosed or suggested in Butterworth, or any of the other references.

Levis appears to disclose a light pipe integrator (LPI). However, similar to the other references, Levis also does not disclose or suggest a rod lens with an optical input surface with an area greater than an optical output surface.

Furthermore, the beam splitter assembly in Butterworth, Fig. 9, allegedly corresponding to the prism of the present invention, makes a polarization split of an incident beam, unlike the polarization beam split array of the present invention which converts an incident beam into a beam of a particular pole, and forwards. Therefore, the beam splitter assembly of Butterworth is different from the polarization beam split array of the present invention. Moreover, since the system of Butterworth has no polarization beam split array, and does not require any collimation of an incident light, because the object of the system of Butterworth is different from the object of the present invention. Thus, the system of Butterworth forms a projector that is different from the projector of the present invention, except that the Butterworth projector includes a rod lens.

For at least the reasons set forth above, Applicant respectfully submits that all pending claims are in condition for allowance. Withdrawal of the rejections are respectfully requested.

II. ENTRY OF THE AMENDMENTS

Applicant submits, as stated above, that entry of the above amendments is requested as the subject matter of the amendments have been examined prior to this Amendment. However, if the Amendment is not entered, Applicant submits that all pending claims are still in condition for allowance. Applicant submits that the above Amendments were merely made to expedite prosecution and to clarify the language directed to the elements of the system of the claimed invention.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Laura L. Lee**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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Date: July 22, 2003